

Amendment
Serial No. 10/758,585
BREAST PUMP PRESSURE REGULATOR VALVE
Docket No. : ECI06-GN015

In the Claims:

1-17. (CANCELLED)

18. (CURRENTLY AMENDED) A breast pump comprising:

an interface adapted to create a fluidic seal between a circumferential portion of the interface and a breast;

a reservoir in fluid communication with the interface for receiving milk drawn from the breast and passing by the interface;

a sink in fluid communication with the interface, where the sink induces a reduced pressure approximate the interface to draw milk from the breast and past the interface and into the reservoir; and

a pressure regulator in fluid communication with the sink to regulate the reduced pressure approximate the interface;

wherein the pressure regulator includes a valve seat and a valve body, at least one of the valve seat and the valve body that are is selectively repositionable to manipulate the reduced pressure approximate the interface by varying the proximity of the valve seat with respect to the valve body, and the valve body is biased away from the valve seat.

19. The breast pump of claim 18, wherein the sink includes a chamber comprising a conduit having a piston riding therein, the piston being repositionable within the conduit to induce the reduced pressure approximate the interface.

20. (CURRENTLY AMENDED) The breast pump of claim 19, wherein the piston travels within the conduit in at least one of an arcuate path and a ~~linear~~ linear path.

21. The breast pump of claim 18, wherein the pressure regulator includes a dial actuator being repositionable in at least one of a clockwise direction and a counterclockwise direction to vary the proximity of the valve seat with respect to the valve body .

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22. The breast pump of claim 19, wherein the piston is coupled to a handle being repositionable by a user.

23-33. (CANCELLED)

34. (NEWLY ADDED) A breast pump comprising:

a breast horn adapted to create a fluidic seal between an interior portion of the breast horn and a breast;

a reservoir in fluid communication with the interior portion of the breast horn for receiving milk drawn from the breast and passing through the breast horn;

a pump in fluid communication with the breast horn, where the pump induces a reduced pressure to draw milk from the breast and through the breast horn and into the reservoir; and

a valve in fluid communication with the pump to regulate the reduced pressure, the valve including a valve body, a valve seat and a helix, the helix mounted to the valve body so that the helix is wound around the valve body and biases the valve body away from the valve seat.

35. (NEWLY ADDED) The breast pump of claim 34, wherein:

the valve body includes a rotationally repositionable dial to rotate the valve body with respect to the valve seat; and

the valve body includes a circumferential housing that houses the helix; and

the helix includes a generally circular disc, the disc including a step change along a periphery that interfaces with the circumferential housing to limit the rotational travel of the helix with respect to the circumferential housing.

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36. (NEWLY ADDED) The breast pump of claim 34, wherein:

the valve body includes a rotationally repositionable dial to rotate the valve body with respect to the valve seat;

the valve body includes a circumferential housing that houses the helix; and
the helix includes two helices to bias the valve body away from the valve seat.

37. (NEWLY ADDED) The breast pump of claim 34, wherein:

the valve body includes a rotationally repositionable dial to rotate the valve body with respect to the valve seat;

the valve body includes a circumferential housing that houses the helix; and
the helix includes two helices extending from a generally circular disc, the disc including a step change along a periphery thereof that interfaces with a circumferential housing to limit the rotational travel of the helix with respect to the circumferential housing.